

# A M E R I C A N F A R M E R.

## RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICE CURRENT.

"O fortunatos nimium sua si bona norint  
Agricolae." . . . . V I R G.

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### AGRICULTURE.

#### REPORT

*Of the Committee on Manufactures, on the various memorials praying for, and remonstrating against, an increase of the duties on imports, January 15th. 1821.*

(Concluded from No. VI. page 43.)

[We extract so much as particularly relates to the interests of agriculture.—Ed.]

The Committee REPORT:

If it is impracticable to legislate a nation into wealth, and impolitic to attempt it, it does not follow that it may not be preserved from poverty: if neither object is attainable, it is not perceived that government can be of any use to the people; if its operations can tend neither to preserve or increase the fruits of their labor, we are at a loss to know the legitimate objects of legislation. To what object ought all national machinery to tend, but the common defence and general welfare of the people? If this does not consist in increasing their resources, as well as preventing their extinction, we must pursue this subject no further till better informed.

The encouragement of manufactures is called coercion; a forcing from one occupation to another. Like the other objections, the best answer seems to this, is its want of application in fact. During the late war manufactures flourished; farmers were not then forced from their occupations. The planter of the south was not prevented from raising cotton; he had no foreign market, but he had a domestic one.—But he felt the practical difference between a market at home and one abroad; the land transportation from the place of production to the place of manufacture, and back again, taught him how much of the value of the raw material, to him, was diminished by the intermediate expenses. Had their manufactories been at home, had the same persons who then established them at the north, commenced and completed them to the south, it would have been called no forcing of occupation, no tax on agriculture. One pound of cotton will now pay for one yard of cotton cloth; when it shall appear, that, before the establishment of our cotton manufactories, or since their decline, a pound of cotton has produced more to the raiser, it will be time to answer any additional objections of this kind. Generally speaking, as there were no manufactories in the southern states, their existence in the northern and middle could not have forced them from their occupations, unless the current of emigration from the south to the north should have been the fact from which this objection has been raised. In Kentucky there were manufactories to a great extent; the farmers in their neighbourhood, and those who represent them, can say whether they are now more prosperous, whether they have now a greater freedom in the selection of their pursuits, or profit in following them. If the same question was put to the farmers in the northern and middle states, if any member of this House, who represents them, was asked if he could point out an instance of even an individual farmer who was against his will forced to abandon his soil, and go to a manufactory for employment, the force of this objection can be tested by the application of theory to practice. It may be asserted, with truth, that wherever the principle has been fairly tried, it has been found that the interest of the farmer and manufacturer has been completely identified—one rises and falls with the other. This is verified not only by personal observation, but attested in the most impressive manner by the petitions presented to the present Congress. Last year thousands of farmers asked you for protection to manufactures; they were from states in

all of which their practical effects had been seen and felt for years.—With all the efforts used to excite opposition and alarm during the present year, it is a remarkable fact, that, in the whole scope of country from Maryland to New Hampshire, a solitary petition, memorial, or remonstrance, of farmers, has not been offered in opposition to the proposed tariff. Those which have been presented are from parts of the country where manufactures never were in operation, and where no correct opinion could be formed of their effects. So far then as respects farmers, this is the result—when their opinion has been founded in fact, it is favourable to manufactures; when from theory only it is unfavourable. There are memorials, it is true, from another class, who, in the name, and for the protection of the farmers, decry the ruinous effects of this measure on agriculture. It is not yet known that farmers have not discernment to know, and spirit to complain, of their grievances; they have shown it, and asked for a measure like this:—when as numerous petitions from them (not from others in their name) shall ask for its rejection, then petitions being balanced, the question may be settled by general principles of policy.

The war duties forced no man from his employment, but gave him security in its pursuit, opened new sources, gave the means of selecting the most profitable, most suited to inclination, habit, and capacity. The war built up establishments which were rapidly developing the resources, and employing all the industry, of the nation. The peace, and the repeal of the war duties, prostrated those establishments, and forced the mechanic, the artisan, from an occupation to which he was led by education, habit, and interest, and in which he felt his best security to be the policy of the government coinciding with the general interest of the people. If complaints of forcing from profitable to ruinous occupations are just from any one class, they must come from those who are practically and virtually forced by the policy of the government to abandon their trade and occupation. Give a mechanic appropriate employment, he acquires wealth for himself, and adds to the interest of others; drive him to the soil for support, he makes a bad farmer—he may raise enough to feed, but cannot clothe his family. If any of us have seen the instances, in actual life, of mechanics forced, from the want of employment, to turn farmers, and been enabled to compare their relative situations in both occupations, we can duly estimate the consequences.

If farmers can be considered as a distinct class of society, and their interest separated from the rest of the nation, it is very certain that it cannot be promoted by increasing the number of those who engage in its pursuits; it increases the competition and diminishes the profits of the productions. To the nation it is not so important that their pursuits should be productive of amount, as value, extensive as profitable. The great object is to afford a market, and give a value to what is raised. We abound in provisions and raw materials; more is now produced than can be consumed or sold; to increase the quantity is only a loss to the raiser; it can give no new value to what he now has, or what he may acquire; it can give him no profit. To the government it can give no revenue, for it does not increase his means of consuming articles of foreign production, and from no other source of taxation does it leave a surplus that can be spared from the wants of the farmer to the calls of the Treasury. Who, then, can be interested in the mere increase of agricultural products, which want market abroad and value at home? The definition, and application to agriculture, of the terms coercion, restriction and, forcing of occupations, is now practically understood

by all those who will look to the state of the country. Where there is no prohibition, duty, or bounty, on imports or exports, shipping or tonnage—occupations, trade, and commerce are free;—whether those clogs are imposed by our own or a foreign government, is immaterial; so far as they extend, they prevent the people from the perfect freedom of choice of occupation, employment, and production, and that freedom can only be restored by the removal of these clogs. Whether the character of the proposed bill has been fairly judged of will become apparent. The clogs on our agricultural products are not on their export; there is perfect freedom in raising and shipping them, but the corn laws of England, France and Spain, prevent their consumption; when they reach their shores free trade ends. The worst effect of domestic coercion would be, to prevent their production or exportation; foreign coercion becomes as effectual when it accomplishes the same object by rendering production and exportation unavailing; the privilege of raising is an useless one, when there is a prohibition to sell or to use. It cannot be less grating to national feeling that it is the act of a foreign government. The duty of forty cents a pound on our dressed flax, is no less a prohibition to our farmer to raise any more than suffices for his wants, than if a positive law forbade it; the bounty on linen is as effectual a check on the making of it here as a domestic excise. The operation of a foreign system which excludes our productions and forces theirs on us, is the practical restraint on agriculture, the essence of a system of restriction under which the whole country now labors: which, when imposed by a foreign government seems to be more admired than dreaded by those, who, speaking in the name, assume the protection of farmers. Every farm in this nation will produce flax, yet we do not export a pound; foreign governments refuse it a market; we do not make our own linen; they give a bounty on theirs to prevent us from making it. They thus, by legislation, force us from the market, acquire its command; the farmer is prevented from raising flax and forced to another product; he tries wool, hemp, breadstuffs—they are also excluded; he is not left free to sell to the people of England, or they to buy, what they want. He is virtually bound to raise only what their government will permit him to dispose of; his freedom of occupation is gone; it is controlled by a foreign power; directed by their policy, he is driven to the pursuit which best meets their views, and most promotes the interests of its subjects. The coercion rests not here; it not only forces ours out, but thrusts their productions in, and, the domestic market is thus taken from the farmer. When national policy and individual association combine to prevent our manufacturers from affording the home market to the farmer, and succeed in the object, coercion becomes complete. How far the middle and western states are now from suffering under the full scope of foreign restrictive policy, the condition of the farmers will best testify. If the north is saved, it is by manufactures; if the south is yet free, it is because the great manufacturing nations find it their interest and not against their policy to permit the consumption of their staples. It would perhaps, not be an useless inquiry to ask whether their demand and price is increasing? The state of the country fully justifies this remark—foreign policy has forced from employment our agriculture, manufactures, and commerce; each interest is low, each complaining; with the infinite capacity to produce, fabricate, and distribute, the power has become useless, without the means of using it; our industry has become paralyzed by the employment of foreign, which has been forced on us by a persevering unyielding course of legislation by other nations. Now,



when our citizens ask of their own representatives to counteract foreign laws, systems, and combinations; and, if not, to retaliate, at least to compel them to restore to us a freedom they have taken away or destroyed—the freedom of production and exchange: that, if the monopoly of our market is to be given by legislation, it shall be such as flows from a conviction of its tendency to promote our interest, and enacted by our representatives, not such as it may please a foreign legislator or monarch to prescribe to us: how far the increased duties proposed will tend to more or less balance the foreign coercion which now bears grievously on all the country—how far it is defensive or offensive, how far it accords with, or contradicts, the policy which this government has adopted in relation to other interests, the House must determine.

There is no portion of the community more injuriously affected by changes in the policy of a country than the farmers; none have suffered more seriously by the repeal of the duties imposed during the war: none felt more practically the dependence on a foreign market for their means of exchange. While they were at his door, the price of goods did not affect him; produce and goods rose together, the same quantity of one would still buy the same amount of the other. Now the scene is changed: goods remain at their old prices, but it takes three or four times the quantity of produce to purchase the same amount. It is often mentioned, as a symptom of better times, "Goods are looking up." This may be, by some deemed an indication of returning prosperity; but, however it may be to others, to the farmer it is ominous of despair; his produce is looking down. When goods look one way, and grain another, the farmer must look to some new mode of turning his grain into something which will produce him his necessities.—While every change depresses domestic and swells the price of foreign products, he feels coercion and what it is to be forced, not from his occupation, but from all the comforts it once produced him. Till goods fall as much as a grain, or grain rises to the price of goods, the farmer pays two or three hundred per cent. more for them, though they may be quoted at the old nominal rates. He who, in other times, could pay for his iron by produce, or the use of his teams when their labour was not required on his farm, can now estimate the difference between buying at the forge or the store. When iron was at a duty of 32½ per cent. personal observation did not cause the objection that it forced the farmer from his occupation, or made it less profitable; when by the existing tariff, it was reduced from 30 per cent. to nine dollars per ton, it neither gave new employment nor increased profits to agriculture. In extending the observation to all other articles of which our country furnishes the raw material, or which when made at home, could be paid for in provisions, it is thought to be fully justified by the melancholy experience of the last four years. It has pointed out to the farmer in what true economy consists; it has learnt him what is cheap and what is dear; the difference between having his market at his door, or transferred to a foreign country. The books of the merchants, the dockets of justices and courts, tell a story that all can understand: it was not so when manufactures flourished; it cannot continue so when they revive; the farmer will be the first to profit by the change; his is the first interest that should excite our attention: though we may not legislate him into wealth, we may save him from the danger that hangs over him: while we refuse to counteract the coercion of foreign legislation, we don't make his occupations free by removing foreign restraints on his market, or give him an equivalent by securing him a new one. It is said, this new market cannot be afforded; that the farmer now feeds all our population, and can feed no more in any event. If this was true to its full extent, it could only apply to provisions. The production of raw materials which have now no value; the extraction of ores and minerals from the earth, which now will not pay the expense: the supply of fuel, which is now useless, the increased demand for pot-ash and dye-stuffs, for the various small items of the produce of a farm, which though

not necessities, are comforts and may add very importantly to the farmer's market as the same population have greater means of payment, all tend to enlarge his means of exchange, his sources of occupation. The mere necessities of life are few in number and low in value, their production is not the most profitable employment of agriculture, it is perhaps the most expensive. The garden, the orchard, the dairy, and poultry yard, the sty, and the stall are matters of no little importance, they afford more profit and require less labour than the grain field. The market for their productions depends, not on the mere amount of population, but the means of that population to extend their purchases beyond necessities to comforts and luxuries, the supply of these is the farmer's profit—the raising of them employs the labor and attention of children, (who are of no use in a field) by occupations in which are combined health, pleasure, economy and industry. If foreign bounties and duties were removed or counteracted, the culture of flax, hemp and wool would be no less honorable or useful pursuits of agriculture than grain; and there is one raw material for the culture of which this country is well adapted, in which is only required the attention of children to enable insects to labor for the emolument of the farmer—raw silk. These are all new sources of wealth by the establishment of manufactures, though the population is the same. There is another—the mechanics who are for want of employment now compelled to procure a scanty subsistence by the cultivation of the soil, without means to purchase, or stock or knowledge to cultivate a farm, who add nothing to their own or wealth of society: who have nothing to spare for the support of government, forming no part of the solid yeomanry of the country, who identified with its soil and strength, may be truly called the salt of the earth; but a miserable tenantry or mere occupants who having been forced by foreign policy from the occupations for which they are fitted, are now only waiting for some act of this government which will enable them to resume them; the number of these is not small and each one of these and their families will become new customers to the farmers. Foreign artisans must not be overlooked, foreign capital will flow to us in no small current, foreign owners and foreign artisans who are now waiting to see in our legislation, some assurance of permanent policy, they are a valuable and useful class of citizens abroad, and so far as our observation extends we should do them injustice in withholding the expression of our opinion that they are distinguished for their public spirit, their good conduct and devotion to the true interest of their adopted country.

There is one other aid to agriculture which must be admitted to be a natural consequence of the establishment of domestic manufactures. Wherever the market of the farmer may be, it will be permanent—co-extensive with the consumption of the country, it will expand with its increase. He will know to what objects to apply his labour and skill; the demand will be steady, he can vary his culture to meet the varying wants of society, he will look alone to his own government, to his own representatives for the rules of policy which may have a bearing on his occupations—which can be affected only by those who are united alike with him in their devotion to the common interest of their own common country, whose pursuits will intermingle with his, forming the common mass of national industry, from which no just government can withhold its protection.

With the notice of one other objection, the committee will close their remarks, with not less relief to themselves than to the House.

If manufactures will produce these effects, why are they not established? If the foreign article can be undersold, why is it not done without the aid of legislation? We answer—because the effects of foreign legislation cannot be removed by individual exertion or enterprise. Whatever may be done here by our citizens, to acquire the command of our consumption, is equalled by foreign individuals to retain it—each feel the advantages, know the profits, and make equal exertions. The superior numbers, and greater wealth

of foreign capitalists, is of itself a formidable obstacle, but when backed by the policy and wealth of a nation, by their laws and systems, the competition becomes unequal. To restore the balance, to make the competition a fair one between individuals, the weight of one government must be taken from the one scale, or balanced by the same weight of another government in the other. We might here ask, if this would ensure the desired protection—why withhold it?

When business has for years taken an established course, it is no easy matter to divert it: the progress of our manufactures was slow till the late war. The consequent diminution of imports, and the duplication of the permanent duties, gave them a powerful impulse; they were rapidly advancing to meet the full demands of the consumers; the revulsion caused by the present modification of the tariff, has been in force ever since. If it has been beneficial to the country, then let it continue; but if injurious, let it be stopped; legislation caused, and alone can cure it. The war duties were not imposed for the protection of manufactures, and repealed when the object was found unattainable or prejudicial; they were imposed for revenue—the object was effected, they protected manufactures—the country prospered, an excise was built on manufactures—the support was mutual. The government wanted revenue, and obtained it; it now wants it; and the same means in their power, why then not resort to them? If for no other, at least the same, reasons as before. It ought not to make revenue the less acceptable because it encourages domestic industry.

If the enterprise and capital of individuals were competent to the object, it must be the work of time, before it arrives, the public resources will require new means of supply: it then becomes the duty of Congress to hasten the time, and this for its own protection and support. But if it should be true that, in the present state of the world, no new manufactory can be successfully established without legislative aid—that it is true, is proved by the experience of all manufacturing nations, confirmed by our own, and it has, by one of our greatest statesmen, been declared to be a maxim of universal application; the fact once established, it would be in other subjects deemed superfluous to assign the reasons, for the want of reasons cannot do away facts, but it being required on this subject that no proposition can be made out from fact and experience alone, it is better to meet than evade the requisition. A most obvious reason occurs at once, that a new manufactory can only attain success by excluding an old one which is in possession of the market; without the aid of a law on either side, or the competition of any capital, except of the individuals who are struggling for the market, the one who can make it the interest of the consumer to purchase from him must prevail, if the capital of both is equal, if it is unequal the greatest will eventually prevail. The competition is not for the momentary, but the permanent command of the market, the losses during the temporary contest, will be refunded by the future profits when the market is secured. Who then can hold out the longest, becomes the question. This is at once settled, when a government bounty comes in aid of the one set. An excise drawback, or a custom bounty, is a contribution from the public funds, in aid of individual enterprise, to acquire or retain the supply of a foreign market; it is not merely an addition to the capital of the individual, but a gratuitous donation to him. Competition must cease between them, unless one individual has funds equal not only to the other, but to his government likewise. Hence no new establishment which diverts employment from an old one, can under such circumstances succeed. It will be an ungenerous objection, to say that our government is not bound to furnish capital to manufacturers, that it is not asked or expected. But it is understood that, in answering the objection now under consideration, it is taken for granted, that manufactures once established are of advantage to the country at large, and that the question is, whether government should interfere to aid them in their infancy or whether such interference is necessary. If this question is answered yes,



then it is hoped that it will not be contended that it is generous or just to withhold that interference on account of the capital of the persons concerned; that moderate capital, skill, industry and enterprise must be suffered to sink under the foreign action brought to bear upon it; nothing be thought worthy of legislative aid, but immense capitals, which require less in proportion to their amount. While on this subject, it would be proper to remark that before this objection should have any influence on us some standard should be fixed, some sum named by law, which should be deemed as bringing the proprietors within the policy of protection. Manufacturers would then know that if they invested to that amount, they could compete with the foreigner. It is not so important what sum should be named, as that some should be fixed upon; it is believed that a republican legislature would not require an amount beyond the means of their constituents to procure. If it was more consistent with theirs, and the principles and practice of the government, to graduate the protection in the ratio of the wealth of those who asked it, that would be more just than to refuse it wholly to the middling class. If the nation at large will be benefitted by protection to manufacturers, it is no answer to say their capital is not sufficient; we must say what is sufficient; till that is done the answer will not be accepted for it affords no rule, no security, it means anything, it means nothing; it becomes mockery. If manufactures are a national interest and justify protection, there cannot be a better rule more equal and fair than to require, as a preliminary to protection, the investment of the same amount of capital as by our uniform legislation for thirty years has been required of another co-ordinate interest—commerce; equal justice to all makes it our duty to make the comparison; it is done with no unfriendly or invidious feeling, but merely to remind the House that want of capital has never excluded the merchant from the pale of protection, if he had enough to commence his operations, those operations have been protected from foreign aggression—It is believed that the capital invested in manufactures has been equal to the investments in commercial pursuits in proportion to the amount of business done, and including the credits at the custom house, that commerce has been conducted more on credit than manufactures.

A linen or glass manufactory is about to be established in our country, there is a capital to erect the buildings, purchase the machinery, and stock to commence; the proprietors meet at once competition from the following sources; foreign manufacturers, foreign exporters, American importers, American retailers, and a foreign government. The American manufacturer stands alone; he asks for a fair chance, fair play, willing to take a contest against equal force, but unable to contend against numbers, wealth and power, he calls on his government to equalise the competition, to make it individual, to impose on the importation a duty equal to the premium which the foreign exporter receives from his government, for the express purpose of breaking down the competition. A custom bounty or excise drawback is not to give the command of the home consumption, that is done by prohibition and duty, it is to force and command the foreign; the bounty or drawback does not make glass or linen cheaper to the people of England, it is to prevent us from using our raw materials, to compel us to use theirs, to employ their labour and give a value to their industry. The American manufacturer is the only person who can obstruct their policy, if he can be broken down the American people must depend on England for a market as well as for the articles of their consumption. It would not be unreasonable to call on this government to give them duties beyond the bounty. If the duty is 25 and the bounty 25, there is no protection except of a negative kind, the bounty received from one government equals the duty imposed by the other, yet even this meets with objections, it is called a restrictive system. In the case of glass the oppression on our manufacture is still greater, the custom, bounty and excise drawback is equal to 28 cents a pound, yet the proposed import duty of 10 cents a pound has not (except in

one memorial to the liberal principles of which, the committee must again give their approbation\*) been exempted from the general and heavy charges made against the new tariff. Unless manufactures are to be proscribed, if those engaged in their pursuits, and to whose benefit they tend, are to be thus abandoned, if the unequal and in part unnatural, anti-national pressure under which they labour is to be increased by a foreign government and ours stands neutral, it may be asked for what government is instituted, where are the benefits imparted to them? The farmer has the raw material, the artisan the capital and skill, but they cannot use it. If on the faith of a revenue system the capital is invested, the labor of years is lost by a reduction of duties below the amount of foreign bounties and drawbacks. It is not the manufacturers alone who suffer; they alone, it must be remembered are the class of men who can ever interpose between the importer and consumer; put them down; the agriculture of the country is completely dependent on foreign powers. Such is our present situation; the people of this nation cannot believe it is their interest to remain so; they support the government and ask protection—the committee think it their duty not to withhold it, and to afford it to such extent as will give a fair opportunity of bringing into active and useful operation all the resources of the country; to give a market and a value to all the products of our soil; to counteract foreign legislation, so far as it bears on the industry of our own people, by directing its pursuits and occupations to subserve the policy and interests of other nations.

If it should be remarked that the proposed bill falls short of the principles on which it is founded, it must not be alleged as evidence of a want of confidence in their correctness, but of the deference which is felt and paid to the opinions of those who differ from us in their views, equally conscientious with ourselves it was due to all the members of this House to convince them that our convictions are so decided and deliberate, that we would be content for the present to lay a proper foundation, leaving it to experience to direct what should be built upon it; if insecure, the more easily removed; if the substantial basis of national industry, the easier to finish the structure.

\* Richmond.

### CULTURE OF MANGEL-WURTZEL.

*Experiments of Governor Alexander Beakson,  
(concluded from No. VI. page 46.)*

Having thus detailed these experiments, I shall now proceed to offer a few remarks, which will show the important benefits that might soon be derived from a general, and extensive culture of this excellent vegetable.

It certainly possesses advantages over every other plant hitherto introduced in field culture. Its produce is immense, and I have found it to grow, with considerable luxuriance, upon land where no other vegetation was ever seen.\* It has also the singular

\* This was determined by an experiment I made soon after my arrival here. I selected a barren ridge, between two deep ravines, on the north-west side of High Knoll. From its situation and declining surface, no moisture could be retained. On the 27th August, 1808, it was trenched, and on the following day sown with sixteen different sorts of seeds, so that it had not the advantage of the meliorating effects that might have been derived from exposure to the air and atmosphere. For a long time there was no appearance of vegetation; at length, in the beginning of April, 1809, seven months after sowing, and when it had been soaked by the rains, I observed the drill of Mangel Wurtzel one fine connected line of thriving plants: the fifteen rows of other seeds, excepting a few of the rape, had not vegetated. This is a positive proof that Mangel Wurtzel would grow in almost any soil or situation. The seeds which were sown at the same time as the Mangel Wurtzel, were Coffee, Cotton, Wheat, Barley, Oats, Pease, Buck Wheat, Spring Tares, Lucern, Burnet, Sanfoin, Silla,

property of being unmolested by an insect (I believe the dolphin fly,) which is here extremely destructive to cabbages, turnips and radishes. I have very often observed where alternate plants of cabbage and Mangel-Wurtzel were growing in the same rows, and touching each other, that whilst the former were absolutely annihilated by that destructive insect, not one was to be seen on the Mangel-Wurtzel leaves.

The Mangel-Wurtzel, when fairly established in the soil (which, like every other crop upon an extensive scale, ought to be just before the expected rains in January and February, or in July and August,) will soon acquire such vigour as to become almost independent of rain: for having a tap root, penetrating 12 to 18 inches, or more, into the soil, it will always find sufficient moisture at that depth for carrying on the process of vegetation. In the course of five or six months, from the seed, if sown or planted in good soil, three cuttings of the leaves may be obtained, which may average about three pounds from each plant; and the roots will then attain weight of five to ten pounds each. Wherefore it seems to me, after every attention I have given this subject, that the most profitable culture would be to take three cuttings of the leaves, and at the third cutting, to dig up the roots—these, as well as the leaves, afford a nutritious food for cattle, sheep, hogs, &c. The leaves are also an excellent substitute for spinach.

It is very probable that a more abundant produce from Mangel Wurtzel than appears in my experiments might at all times be secured, if the lands were manured and carefully prepared for its reception, and the proper seasons of sowing and planting attended to. In a piece of strong land at Plantation house, newly broken up, without being manured, some of the plants from seed sown on the third of January, were set out on the 6th of February, 1809. On the 11th of October following, I sent on board his majesty's ship Lion, fifty of those plants, which were the finest I had ever seen. The following were the weights and circumferences of the five largest.

	Weight of the whole plant.		Circumference of the roots.	
	lb. oz.		ft. in.	
No 1.	—	41 3	2	1
2.	—	39 1		9
3.	—	39 6	1	10
4.	—	38 0	2	0
5.	—	37 14	1	11

At Longwood, Colonel Broughton has lately taken up some very fine specimens from land that was not manured—they were of six months growth from the seed—the leaves have been cut twice. Many of the roots weighed from six to ten pounds each—but admitting even the lowest of these rates, and allowing one pound of leaves at each cutting, the produce would be eight pounds from each plant; which, at 20,000 plants to an acre, would be 160,000 pounds, or about 70 tons per acre, of nutritious food for cattle, in the short period of five or six months from the time of sowing the seed. Can any thing place the importance of the culture of Mangel-Wurtzel in a more obvious point of view than this deduction?

But the largest plant that has yet been produced here, is one I sent to England, with several others, in July, 1810. It was raised from seed, put in the ground on the third of March, and transplanted to land newly broken up, on the first of May, 1809—when it was taken up in July (that is, at sixteen months from the period of sowing) the circumference of the crown of the root measured 37 inches. It had about twenty strong horizontal branches, two or three inches in diameter; the leaves and small ends of those branches were cut off, and weighed 52 lbs. The root and remaining parts of the branches on it, in the state it was sent to England, weighed 63 lbs. In all, the weight of this one plant, from unmanured land, was 115 pounds. I have been since informed it

Chickory, Rape and Sunflower. Not a plant of any of these, except the Rape, which soon after died, ever appeared.



was by far the largest of the kind ever seen in England.

ALEX. BEATSON.

St. Helena, 15th October, 1811.

NOTE.—The Board of Agriculture cannot admit that any accuracy attends the method pursued by Gov. Beatson, in ascertaining the acreable produce of the crops here noted; nor is it at all essential that Mangel Wurtzel should yield so immensely as it is stated to have done in these trials: it is sufficiently clear, that the produce is very great, probably exceeding that of any other root. The great effect of Guana manure is an object particularly deserving attention.

#### GRANO MAZZOLO—LEGHORN BONNET STRAW.

We received some weeks since a small parcel of this Wheat, which enabled us to give some grains of it to many persons, with a particular request to have it cultivated, that the Straw from its future produce might be wrought into Bonnets. We had so little of the seed, that it was not in our power to send enough to any one to begin the manufacture of its Straw this year. But as many persons will no doubt save a plenty of the seed this summer, to sow next spring, with that intention, we now publish the instructions that were given with the seed to the Massachusetts Agricultural Society, by Mr. Ombrosi.

[Editor Am. Farmer.]

#### Directions for Sowing, Gathering and Bleaching.

"The wheat is of the same kind of which bread is made; it is sown in the month of March, and from this circumstance, is called by the Italians *Grano Mazzolo*.

The first requisite in the straw for manufacture is *fineness*. To obtain this quality, it is sown only in dry and sterile soils, and extremely thick, to prevent its growing large at the root. In Tuscany, the proportion to that sown for grain, is four to one, on an equal extent of ground. When the blossoms first appear, or the ears of the grain are beginning to seed, the time for gathering the straw has arrived—this is about the 24th of June, unless vegetation has been unusually favoured, or retarded by the season. The stems are pulled up by the roots, made into small bundles, and dried in the sun. When dry they are stripped of the leaves which cover them, as far down as the lower joint. To bleach the straw, the bundles are spread open to the morning dew and to the sun, and are always taken under cover in case of rain; for rain would stain the straw, and greatly impair both its beauty and its value."

We have just received a specimen of the Leghorn straw, from Dr. Samuel L. Mitchell, with the subjoined note recommending its cultivation and manufacture. Forty of these straws would scarcely measure as much round as would a single straw of common wheat, and their colour is clear and pale, but beautiful.

New-York, 30th April, 1821.

MY DEAR SIR—My amicable relations with Tuscany, in Italy, enable me to offer you, for your Port-Folio, a sample of the dwarf wheat, from which the fashionable Leghorn bonnets are made. The scientific history of the plant, a species of *Triticum* or *Wheat*, is given by Dr. Philip Gallizioli, in the second volume of his *Agrazian Botany*; a copy of which in 4 vols. 8 vo from the learned and accomplished author, is in my Library.

I hope you will endeavour to interest the ladies in the culture and manufacture, as well as in the consumption of the article. Here, as far as they know it, they are becoming enthusiasts for raising and working it.—"Ceres," say they, "wore a crown of Wheaten Ears, and we in this age of economy and patriotism may venture, without reproach, to cover our heads, with a hat of Wheaten Straw."

I need not recommend to you, the economical consideration, whether the region watered by the Patasco, will not answer as well for its production.

Truly, and with esteem and regard, yours,

SAMUEL L. MITCHELL.

For the American Farmer.

#### What Grass can be substituted in Georgia for RED CLOVER? What will Cure Horses of the BOTS?

SIR—The time is coming when we must change our domestic economy and method of agriculture.—The present method impoverishes our lands to an alarming extent. The cotton crop takes up so much time, that we manure but little and fallow none. The heat of our climate destroys the clover. Plaster of Paris is here deemed as inert as sand. Hence the ravages made on our Woodlands, and the outcry about old fields and worn out plantations. The eulogiums bestowed upon the inventor of our saw-gins, were many and just; but the man who shall introduce a substantial grass for grazing, will deserve more of his country. The situation of our live stock is bad indeed unless corn-fed. Crab grass is the only grazing, and corn-blades are our only fodder. I therefore wish to learn from some of your southern correspondents, what species of grass would most probably support our cattle in this warm climate? All experience proves the inutility of the cultivation of northern grasses. The white clover thrives in our wet lands, especially in the upper parts of the state; but we want to obtain a grass that would be a substitute for Red clover, and to accomplish this, there are many planters who would incur heavy expenses. Accept my best wishes.

N. C.

P. S.—Should you know of any remedy for Bots or Grubs in Horses, please to publish it. This disorder is very destructive every year, and our people make use of many remedies, among the most effectual of which are linseed oil and Red Onion Juice.

I believe that mules are not liable to this disease, a circumstance that adds greatly to their value.

#### ON PEA HAY.

September 11th, 1815.

SIR—It seems to be conceded on all hands that an ally to Indian corn, on which we have heretofore relied for the support of our horses and stock during the winter and spring, has become absolutely indispensable, for it can no longer be concealed, that under our present wretched system of husbandry, this grain exhausts very much; and whilst it yields every succeeding year, a more straitened supply, returns less of the earth than any other we grow. By some unaccountable oversight, the stalks which are in other states carefully husbanded, and turned to good account, both as an article of food and manure, are with us, suffered to remain through the winter exposed to the influence of sun, air and frost, or else a half starved drove of cattle is turned in upon them to glean a scanty subsistence. To the exhaustion that lands necessarily experience in the production of every kind of white grain, is thus added waste, and the serious damage that kneading them into mortar, invariably occasions. In this poached state, all the benefit they may have derived from frost is entirely lost; and they are likewise prevented from imbibing those particles from the atmosphere, which constitute so essential a portion of the food of plants.—For remedying these evils, which were so severely felt in the diminished product of our crops, and increased poverty of our farms, many of us had recourse to small grain, which it was confidently hoped would at once ameliorate the soil, and supply all deficiencies. Among these, wheat and rye had the preference; but experience, so far from justifying our choice, has compelled us to admit that they impoverish much more than Indian corn, that they yield less to the acre, and that their litter is not to

be compared, either in quantity or quality, with that of Indian corn, whilst the food they furnish, is also less substantial. With the same view, oats have been tried, but owing perhaps, to the small quantity of seed sown to the acre, they have proved even more injurious and less productive than either wheat or rye. Notwithstanding, however, the ill success of these experiments, we ought not to be discouraged, since other crops may do for us, what we had too inconsiderately expected from those of small grain. As promising a more favourable issue, we earnestly recommend leguminous crops, particularly pease, which will answer the double purpose of shading and opening the soil.—They give besides an excellent food, and the hay made of the vines is superior to any we have ever tried. We have known several horses to be kept through the winter, in excellent order, upon what was gathered from a corn field of small extent. It is no material objection to them, that they are difficult to cure, for if that be the case, they are also not easily spoiled.—As another auxiliary, let us bring to your notice, oats, which ought, however, to be sowed at the rate of between four and five bushels to the acre, and cut before they shoot the ear.—Oats have been found to do well at the northward, on lands not differing in quality from our own. It is, however, to be distinctly understood, that they are to be grown in this manner, only on farms which have no meadows. To these may be added Guinea Corn, which succeeds well here, and affords a greater quantity of green food for soiling, than any plant I am acquainted with. It will besides enable us to abandon pasturing our fields, which is perhaps the most fruitful source of their poverty. Chicory and mangle wurtzel, or the white beet, may also be tried. The former of these is spoken highly of in England, and may answer well here.—It is greedily eaten by horses and sheep. Like Guinea corn, it may be cut several times thro' the summer. Above all we recommend meadows. To these only can we look for effectual relief from the incumbrances under which our corn cribs daily groan; and for a constant supply of manure, upon which, it cannot be too often repeated, all economical farming must be bottomed. We have not noticed cabbages, potatoes, parsnips, turnips, carrots, &c. because we do not think they will answer. Most of them have not done well at the northward, and from the trials we have made of them, they will do worse here. As coming within the subject of economy, we recommend that all manures be diligently saved and applied; that weeds be carefully extirpated; and that farms should never be burthened with supernumerary horses or cattle. I am, &c.

JOHN L. NORTH,

Chairman of a Committee.

J. T. LEWIS, Esq. Corres. Sec'y.

Pendleton Farmer's Society.

(To be continued.)

#### CULTIVATION OF MELONS, CHANGE OF SEED, &c.

Extract of a letter to the Editor, dated (S. C.) April 15, 1821.

Another reason which induced me to forward these melon seed, was the information given me by a gen-

tleman from New-York, who assured me that the melons from southern states, were considered of a better flavour than those grown more northwardly, and this was confirmed by some young men of my acquaintance, who observed that the melons which they tasted during their tour in the north, were insipid in comparison with those of this state. The delightful flavour of ours, I think, greatly owing to the method of culture pursued by us. On the plantations near the city, and from which the markets are in a great measure supplied, the melons are very rarely planted in the garden, but either in the sweet potato or the cotton field. The best are raised in the cotton field, and what would to most other plants be their destruction, serves to heighten the flavour of them; this is the shade afforded by the cotton plants to the vines and melons; and however curious it may appear, I can assure you, that with no other attention than that bestowed on the cotton, during its culture, these melons are superior to any that are raised in the garden. I do not mean as to size, but flavour. A neighbour of mine, who has for many years sent melons to market, and whose melons were eagerly sought after, planted all of his in Cotton Fields. The melons raised in potato fields rank next to these, being partly shaded by the rich foliage of the potato vine; but in the garden they are necessarily exposed to the violence of the sun.

I have tried both methods, and I now never think of planting in the garden. How far these remarks may be applicable in your climate, I am unable to say: but I think that it may be worth your while to make the experiments in your corn and tobacco fields.

**GUINEA CORN** is a good substitute for Grass; how can manure be saved best from Swine in Pens and at Distilleries?—**A PLOUGH MAKING ESTABLISHMENT** would be profitable in N. Carolina.

BURKE COUNTY, (No. Ca.) April 2, 1821.

SIR—I enclose to you in this letter, a few seeds of Guinea Corn; if you have not seen any before, it may be a matter of curiosity to you. It is cultivated in the lower part of this state, for soiling and as forage; it is particularly valuable to those parts of the country where the cultivated grasses will not succeed—it is cultivated like Indian Corn, but planted closer together, shoots out prodigiously, and may be cut five or six times in a season.

And sir, as I am one of those farmers, who believe that the great secret of farming consists in an industrious collection and skilful application of manure; that the first object is fertility; and that any hint may be useful that is in any degree calculated to hasten, "this consummation, so devoutly to be wished" by those of us, who depend on the good genius of the Plough for support; I have been tempted, by the prompt and obliging manner in which inquiries have been answered through the medium of your paper, and information solicited from your numerous correspondents, to request that they would state the best method known; 1st Of saving manure from fattening hogs? 2dly Whether any good method has been devised, for saving manure from hogs running, at a distillery?

I feel a wish to have these inquiries satisfactorily answered, because I have experienced the superiority of manure saved from fattening hogs, over farm pen, or stable manure, when applied to Indian corn. I last year succeeded in saving 5000 cubic feet of manure, from 80 hogs fed nine weeks; but, as I am convinced that much more might have been saved, I need not

go into a detail of the method then pursued by me—I have not yet succeeded in saving manure, from hogs running at a distillery.

From the encomiums that I have seen on Burden's Plough, I am anxious to try it, and wish to be informed whether they could be procured to the southward, say in Charleston, or Fayetteville, and at what price? And whilst on the subject of ploughs, permit me to mention, that I believe that the establishment of an agency for the manufacture, and sale of improved ploughs, at one of the numerous Furnaces, in Lincoln county of this state, would contribute much to the advancement of agriculture in the western parts of North Carolina. At those Furnaces, excellent iron work could be made, the other material is abundant, and I have no doubt such an agency would be profitable to the patentee or any other good workman. Barnard's Ploughs, are the best that I have yet used; they are Wood's improvement on Freeborn's patent; all who have tried them, bear testimony to their excellence; the cost and difficulty of procuring them, alone prevent their being brought into general use. You will excuse the diffused and hasty manner in which I have written you; and accept my best wishes for your success. Very respectfully,

Your obedient servant,  
I. T. A.

For the American Farmer.

#### MILLET.

Remarks on its cultivation, use and varieties.

SIR—If you will obtain for me from E. Ruffin, Esq. and Doctor Coleman, specimens of all the kinds of Millet Seed, which they mention in the "Farmer," I will sow them this spring, and give you their Botanical names. It is impossible to be accurate by calling plants, similar in nature by their popular names. The Millet of Pennsylvania is the "*Panicum Italicum*," and you will find it described in Rees' Encyclopedia, fully by that name. And in Miller's Dictionary, you will find that a vast many species of the genera *Holcus* and *Panicum* are given, and it is to those that Miller refers under the head Millet. Your Society, or Baltimore Library, ought to get the last edition of Miller's Gardener's Dictionary, by Professor Martin.

I am anxious to clear up the confusion about these seeds. The *Panicum Italicum*, is an excellent grass, and should be cultivated at your farm—no grass will produce so much green fodder as Millet. Do not suffer it to stand until "dead ripe," because the stalks will be hard; but cut it before the seeds are perfectly ripe; after drying set it up in small bundles for a day or two in the sun, and the sap in the stalks will ripen the seeds; then cut it in a box and feed it thus; threshing out or beating out the seeds if you please, and nothing will go further. The seeds ground make admirable slop for cows, and Mr. Peters says, that when the seeds are ground and bolted, the flour raised with yeast makes admirable cakes; and when made into mush and fried, it is superior to fried corn meal mush. The people of the 'ancient dominion' will not believe this. Half a bushel is the dose for an acre, and time of sowing is about the

middle of May. I have lately received from Russia, some *shelled Buck Wheat*, and when boiled, and the water considerably evaporated, I have found it excellent, eaten with milk or with butter. Accept my respects. J. M.

For the American Farmer.

#### CULTIVATION & MODE OF GATHERING CORN, &c.

GLOUCESTER COUNTY, (Va.) April 28, 1821.

DEAR SIR—Some numbers entitled 'Rural Economy,' having lately been published in your paper, I ask permission to offer a few comments on that portion of them which relates to *Indian Corn*, as it is a staple article in our section of country.

Having no acquaintance whatever with the author, I could have wished that he had given us something more definite in regard to his practice as a cultivator of corn, than his "*acknowledged few years experience*"—because his assertions and instructions differ in many respects, not only from what 30 years culture of corn have taught me, but from almost all that I have ever heard from the old corn-makers throughout the tide water section of the state. Not that a mere novice (which I am far from saying this gentleman is) may not sometimes, in a happy moment of inspiration, strike out an invention which will put to shame the old plodding practice of centuries; but I think I may venture to say, that the chances are considerably against it. Now, whether the author of the numbers on "Rural Economy" be a young gentleman, who writes more for his own amusement, than for the information of others; or an agriculturist of sufficient experience to teach others the art of agriculture, I know not; but this much I do know, that corn is not a staple article in Fauquier, and that it is so in every part of Virginia, from the heads of our navigable rivers to the sea board. I also know, at least I think it highly probable, that the culture of corn, or indeed of any other article, will be better understood and practiced where it has been cultivated as a staple production both for domestic consumption, and for market, than where it has not been used for both purposes.—With these prefatory observations, I now beg leave to submit certain remarks on what this gentleman says of Indian corn, and its culture.

In some of his preliminary statements I entirely agree; but there are others again which I confess to my shame, that I cannot understand. For example, I perfectly acquiesce in the assertion, that "on a soil positively barren at the surface, nothing can be lost and much may be gained, by turning it under from seven to twelve inches"; but how to make this twelve inch turn under, I know not. I also think him entirely right in determining not to go "into a chemical analysis of water, air, light and caloric," but to confine his meaning of the old familiar terms "sun, air, and moisture" to "these natural elements, as they are known to predominate in our atmosphere"; for we planters and farmers might be at some loss to recognize our old acquaintances in a dress different from what we have been accustomed to. What he



can mean by "the growth of grass in the abstract not injuring that of corn?" I cannot comprehend; because in our section of country we have always believed that abstracted grass, or grass in the abstract (which I presume is pretty much the same thing) had no growth at all. In his declaration that "an army of grenadiers, attached by patriotism to its home—to the endeared land of its nativity, is invincible," I am very sorry that I can by no means agree; for whether he applies it to man or corn, it is equally inapplicable. Many grenadier armies of corn I have seen conquered in the course of my life to the great grief of the proprietors; and history informs us of numerous grenadier armies of men, that have also been compelled to yield to superior numbers. His next assertion seems to me equally inadmissible, without many limitations or exceptions. It is this, "Indian corn is the most vigorous plant in the natural world: after it shall have become knee high, no wet destroys—no drought kills—no grass can injure it." I will not take upon me to affirm that there may not be other worlds besides the natural one, nor will I venture to say, that if there are, they may not contain plants of a still more vigorous growth than Indian corn; neither will I deny but that knee-high corn in Fauquier, may be capable of flourishing in spite of wet, drought or grass. But I will positively assert, that throughout the whole country in Virginia, where most corn is made, not only drought and wet, but even grass, will often injure—nay, entirely kill it.

In assigning the proper distances at which to plant corn, the author of "Rural Economy" gives only two—to wit: squares of 4 or 5 feet. With us the distances are varied from 5 and 5½ feet each way, two or three stalks in a hill; to 5½ one way, and every less distance the narrow way, down to nine inches. When your correspondent comes to speak of harvesting the crop, by way of giving his own mode the preference, he undertakes to contrast it with what he calls "the customary way of management." That he must have seen the mode which he describes, I can have no doubt, for he does not speak of it as hearsay; but I can assure you, Mr. Editor, that I who live in the midst of a corn country, and have cultivated corn, as well as seen it cultivated for 30 years, have never witnessed a process similar to the one described by Mr. B. Our blades, instead of being placed loose between the stalks, before binding, are bound up as fast as they are pulled, in bundles which when dry, will require from 2 to 4 to weigh a pound. After hanging two or three days on the stalks, they are collected at night and heaped, or put into cocks, if the weather be threatening. In three, four or five days, according to the season, they are made up into large stacks, where they remain, until carried away for use. This fodder is fully equal to the best made hay, both in smell and nutritive power. The tops are cured with almost equal care. Whether the blades and tops thus managed can possibly be inferior both "in quantity and quality" as provender for stock, (which Mr. B. asserts,) to the same parts of the corn plant exposed as Mr. B. recommends, from the middle of September, for several weeks—nay, often

until the last of November. Any man, I think may satisfy himself, who has ever noticed the difference in smell and appearance, between finely cured and well preserved hay, and that which has been left in small cocks, badly put up, and exposed to the weather, until both the fine smell and colour are gone. That it may not be worth the additional labour and expense to cure corn blades and tops as we do, where there is plenty of good hay, may possibly be true; but that tops and blades in the state in which they must inevitably be when they are both left on the stalk and in small unprotected, loose piles or cocks, for many weeks, are superior either "in quantity or quality" to those managed as we manage them, I know to be *untrue* in regard to our country; although I will not say but it may be otherwise in Fauquier. Another objection to Mr. B's method as applicable to the country where corn is relied upon as one of the chief products for market, is, that if any of the varieties of corn which we cultivate, is cut up and put together at any time before the shuck be dry, in such heaps as are always made in the country where it is the practice to cut up and stack the whole plant, the cob and that part of the grain attached to it, will become mouldy, and contract so disagreeable a smell as to be unsaleable. This often happens when we put up our corn in close houses, even where the ears have remained for several weeks on the stalks, after both the blades and the tops have been taken away. The centre of a large bulk of corn, rapidly thrown together, and suffered to remain until the succeeding spring or summer, which is the usual time for selling throughout our corn country, will often be much injured, notwithstanding the previous exposure of the ears before gathering. These facts are matters of very long experience to all the old corn makers of our country—without any "I will venture to assert" about them. Still, if any gentleman, either young or old, will tell us something new and beneficial in regard to the culture and subsequent management of corn, which is applicable to our own soil, climate and situation—something too, that is matter of well tried experiment, rather than of crude hypothesis, we shall be very much obliged to him; otherwise, although he may choose to take "the King's highways" for the very benevolent purpose of giving us theoretical advice; we must be excused from regarding him as a competent teacher in matters wherein according to his own acknowledgment, he has but little experience.

TUSKARORA.

#### *The process of INOCULATING GRASSES, or converting ARABLE LAND INTO PASTURE by transplanting turf: as practised in the Island of Great Britain.*

The arable land intended to be laid down, being cleaned and fallowed in the usual manner, a piece of good clean turf conveniently situated is selected, from which the plants are to be taken; and as soon as the ground is moist in autumn the operation commences, with paring the turf off as thin as possible, by a plough with a very sharp broad share, the turf is thrown into carts, and taken to the arable land, where it is set in small heaps, in regular lines in the manner of dung; it is then thrown about and chopped into pieces three or four inches square—a scarifier is then run through the ground for the purpose of levelling the cart

wheel ruts. Women and children are then employed to turn the pieces of turf, with the grass side up, placing them in regular order, at about six or eight inches apart, according to the size of the plants, and as the pieces are placed, the operators press them down with their feet. When the turf is all placed, a roller is run over the ground, which completes the process for the winter. In spring the ground is again rolled—no heavy stock are turned upon the young pasture in the first season, but sheep are turned upon it after the grasses have formed their flowering stems. These perfect their seeds, and deposit them over the vacant spaces, and in the second season, the ground is completely covered, by the extension of the mother plants and their young progeny. A permanent turf of indigenous plants is formed, which neither sicken nor die away, as is but too generally the case with seeded pastures in the second and third years. If it is wished to continue the land in grass from whence the plants are taken, the turf is only cut out in ribs nine or ten inches wide, and the remaining turf well pressed down with a heavy roller when the ground is wet. A top dressing of compost manure is applied, and the turfs unite in one season.

Beans are sometimes planted or oats sown *thin* upon the transplanted pasture, as a set off to cover the expense, but when a crop of corn is taken, the pasturage is in a great measure lost in the first season, and the young pasture injured. The transplanting is generally done in autumn, and sometimes in spring—in either case, attention is paid to turning and pressing the turf into the ground, as expeditiously as possible, so as to prevent the frost from injuring the roots. By the transplanting system, a permanent turf is obtained upon a description of soil on which it is extremely difficult to get a turf of good grasses by any other means heretofore practised in this Island.

NOTE.—Mr. Blyth, of Burnham, planted 50 single horse cart loads of turf per acre upon his pasture, but the quantity must be regulated by the means.

The turf from whence it is intended to take the plants, is sometimes scarified and cross-cut before the paring plough is used. This operation is effected by an implement with scymetar tines *well weighted*, but the turf must be tender, the ground level, and free from stones, for this implement to work with proper effect.

The seeds of cow grass, and of some other favorite grasses are sometimes sown upon the transplanted pasture; but this is unnecessary when the indigenous grasses in the planted turf are good.

### MILLET.

*When should it be sown, and how?*

ANNE ARUNDEL COUNTY, Maryland, }  
May 3d, 1821. }

SIR,—Millet has of late been highly extolled and recommended; and particularly in a paper copied into the American Farmer of the 16th March—but, without any instruction as to the time of sowing, and mode of cultivation. If you have it in your power to give any detailed information upon the subject generally, its publication in the Farmer would no doubt oblige others who may wish to try it, as well as myself. Probably a later period than the next publication of the Farmer, would be too late for the present season, if, indeed, that be not already the case. I cannot, however, help expressing some surprise, that such an extraordinary useful plant as the millet has been described to be, should not long since have been better and generally known. I do not find that Sir John Sinclair ever mentioned it in his Code of Agriculture—and the little that is said of it in Dr. Mease's Encyclopedia, is not very commendatory—but, if it indeed be true, that it will yield, upon only *tolerable good soil*, two and a half to four tons of provender per acre, so excellent that all the stock on the farm prefer it to the best hay, we then have found a *grand desideratum* for farmers. I am willing to give it a trial.

"A LEARNER."



**Directions for raising DOMESTIC FOWLS, with remarks on their habits**

**TURKEYS**—Put them up at night, examine them in the morning; those that are not to lay, turn out, let the others remain in the house, feed them and set water by them, give them a little straw, or litter of any kind, that they may make themselves a sort of nest. If they lay before dark, turn them out to dust themselves. The eggs put in a box, or basket, where they will not be liable to be shook; twice or thrice a week, take them out one by one, and turn the part of the egg that was upwards, down, in order to prevent the yellow from cleaving to the side of the egg. When they want to sit, which you may always know, they will be on their nest at night; then have large nests made, so high that they cannot see each other; let the ground be quite level and smooth where they are fixed, put about a peck of stable manure in each nest, next the ground, and plenty of the finest hay or straw you can get—on that, give them 19 or 20 eggs, feed and water them every day, and add fresh straw or hay to their nests two or three times a week—it is well to look at them two or three times a day, to see that they are all in their place—they are apt to go two on a nest, if they are not attended to. They generally go to sitting within a few days of each other—it is bad to have them to hatch at different times—when they hatch, and for a week after, they require particular attention. Sit patiently with them, a dozen times a day, as long as they will eat, and call them all the time, in order to rouse them, for they are sleepy things at first; feed them with corn meal made wet, put a little black pepper in it to give them an appetite; any thing of a hot nature, such as onion tops, pepper grass cut very fine, and mixed with the meal, is very good for them, and learns them to eat—they require less water than other fowls. When they get to be about a fortnight old, they are apt to get lousy; when that is the case, grease with a little hog's lard, the top of their heads, under their throats, and in their quills, and perhaps, in a few weeks after, it will be necessary to repeat the same operation; this may be done in dry weather.

**MUSCOVY DUCKS**—Require a place where they can, undisturbed, go in and out to lay their eggs. When they sit, they come out every morning early, to get a plenty of corn and water; they return to their nests, and you see no more of them until next morning. They will bring the young on s out to look for food—they want feeding, and water in a shallow vessel, that they may not drown themselves, and to be kept out of the rain; in a short time they will learn to go to a coop made with tobacco sticks, which ought always to have vituals and water in it—at first they eat but little; therefore, it is necessary for them to have it whenever they please, that they may eat often.

**GEESE**—Make as many nests as you have geese, so high that they cannot see each other before they begin to lay their eggs. Keep them up until they lay an egg or two, after that, they will of their own accord, go to the same place to lay—take the eggs in the house every night, and keep them in a warm room in a box of bran, and a cloth put over all—mark the egg, that you may know the oldest to sit first. When they hatch, keep the young ones in a small place; say planks set up on edge, so as to form a pen, until they get strong enough to follow the geese, which will be in about ten days; then they require but little feeding, provided they can get plenty of grass and water put them up every night for fear of a rain.—While they remain in the pen, have it moved from one place to another, that they may have fresh grass—feed them very often with corn meal, made quite wet—keep water by them, in a wide, shallow vessel. Eggs of every kind should be kept free from grease.

Give chickens as much as they can eat; keep them out of the rain, grease them whenever they get lousy; keep the hen house clean, and keep good nests. A. S.

**MANGEL-WURTZEL.—ANOTHER VIEW OF IT.**

Mr. Skinner,

The "Farmer" of April 29th, contains very high commendations of the *Mangel-Wurtzel*—

my experience has led me to a result, respecting this root, widely different from that to which you and others have arrived. In the spring of 1819, I procured a five dollar box of Cobbet's garden and field seeds, from New-York, which contained a considerable quantity labelled *Mangel-Wurtzel*. Having read much of this root, I assigned a rich spot in my garden for a thorough trial of it. The seed came up well, and the plants grew rapidly—from the English accounts, I expected a number of successive cuttings of the leaves, and I had no reason to complain that the growth of tops was not luxuriant enough. I would have obtained two or three cuttings, but my misfortune was, that I could not find an animal on my farm that would eat them. I was much chagrined at the unexpected refusal of my cattle to eat this, so far fetched and far famed fodder. But nothing, not even hunger, would prevail on them to swallow a single leaf. I had, therefore, only the gratification of ascertaining, as a matter of abstract speculation, that the *Mangel-Wurtzel* will produce more than one crop of tops in a season.

The roots, when fully grown, disappointed my expectations almost as much as the tops had done—but not in the size; for they weighed from an half pound to fourteen pounds each. My stock, with the exception of one ungainly looking calf, shewed a decided distaste for them, while they eat carrots, Swedish turnips, and potatoes greedily. As I was assured by books, that the *Mangel-Wurtzel* contained a great quantity of saccharine matter, (which I suppose must be indicated by the taste,) I resolved to allow an appeal from the unfavourable decision passed on this root in my barn yard, to my own table; desiring to satisfy myself whether they would be good for cattle, supposing they would eat them. But here the former decision was affirmed; for I never tasted a more insipid vegetable. The palate certainly can detect hardly a perceptible portion of sugar in them, though it is discovered in such quantities by Sir Humphrey Davy's chemical analysis. I now conclude, as you may well suppose, that I had satisfactorily proved the inutility of the *Mangel-Wurtzel* crop: and I confess, my confidence in information, derived from agricultural treatises, was considerably shaken.

I do not send you, sir, an account of this unlucky experiment, expecting, or desiring to weaken the evidence in favour of the *Mangel-Wurtzel*, resulting from the experiments and opinions of such men as Sir Humphrey Davy, Mr. Cooper and yourself—I wish only to excite inquiry on two points. 1st.—Whether there is not a spurious kind of *Mangel-Wurtzel*, of which even Cobbet might have vended the seed. And, 2d.—Whether this root can be grown as advantageously in Massachusetts, as in the more southern states. If the kind I raised, should prove a valuable crop here, it will teach at least one farmer, not to place too much reliance on one or two experiments, however apparently decisive.

The seed I sowed, resembled the common beet seed, but was smaller. It precisely answered the description Cobbet gives of it. The roots grew, the greater part, out of the ground; especially those that grew large; and were of a

considerably lighter red than the common beet.

Your's, respectfully,  
JOHN W. HUBBARD.  
Worcester, (Mass.) May 3d, 1821.

Occasional Extracts to the Editor.

**RUTA-BAGA,**

KEEPS WELL AND IS PRODUCTIVE.

Extract of a letter to the Editor, dated

PORT-TOBACCO, April 21, 1821.

SIR: As various opinions have prevailed relative to the product, as well as the length of the time the *Ruta Baga* will keep sound—I have it in my power to state that of all vegetables, they are least liable to injury during the winter, I have ever saved. I have at this date, 20 or 30 bushels as sound as they were at the time they were taken from the ground, which was a few days before Christmas, and after the very severe frost we had in December.—I sowed for them on the 29th June last, on rather a stiff soil, originally very poor; after covering the ground with stable manure, and ploughing it twice, not very deep, and harrowing once—they were once worked with the common hoe, and thinned the width of it, the tops were given to the cows from the time the root was well set in the ground, until they were gathered. The product was more than at the rate of 400 bushels to the acre, and the turnips large. When they were taken from the ground, they were permitted to remain several days encountering pretty severe frosts, and were then put in heaps of fifty or sixty bushels, and covered with wheat straw and earth. These were from seed purchased in Baltimore of Mr. Casey.—I also sowed on the same kind of ground, seed from the *Ruta Baga* set out in the spring, on the first day of August, and at the same time some common turnips. The latter were uncommonly fine, the others not worth gathering, although the tops are luxuriant. I have seen hogs and horses eat the *Ruta Baga* after refusing the common turnips. I believe either would have been still better had they been sown on the fifteenth of June, or indeed earlier; for the greatest growth in the roots, was from the last of September until frost, or after the tops had nearly ceased to grow.—We must have seed of the preceding years saving, as I am inclined to believe they cannot be brought to maturity in proper time from roots planted in the spring.

D. J.

For the American Farmer.

**Varieties of CORN, TREES and SHRUBS.**

FRANKLIN, (Missouri) March 3, 1821.

SIR—My motive will be a sufficient apology for my addressing you. If I could in any way promote the good work, you are now engaged in, I would do it with pleasure.

I lately observed by your address in the paper, that you wished to procure the varieties of corn, that are cultivated in the U. States, and seeds or roots of trees, plants, &c.

**OF CORN.** The varieties here, are 1st. The common kinds of field corn. 2dly. The *Mandan*-corn, from the Indian village of that name. It is very early, and is generally planted in gardens. I have lately heard that a crop of it was gathered at Council Bluffs, and the produce of one acre was 120 bushels. 3dly. The *Pop-corn*, as it is vulgarly called; this is very prolific, and bears bunches of ears, tier above tier; and I think that it might be cultivated to advantage and saved by cutting it up near the roots, in the manner that *Stock-corn* is used in Kentucky.

4thly. *Stock-corn*, bears a long slender ear, and is dried for feeding cattle, without divesting it of its ears.

5thly. *Broom-corn*, and *Chocolate-corn*, or *Holcus Bicolor*. This corn might with proper management become an article of much benefit, it is used by the first settlers of this quarter of the country, instead of chocolate, and is a good substitute. The preparation is simple. I will if you desire it, give you the re-



ceipt for making it.\* It might very well be introduced in the manufacturing of Chocolate, and be a saving of much expense in the purchase of cocoa-nuts.

OF MILLET.—We have three varieties, and they are worthy the attention of the experimental farmer.

OUR COFFEE-NUT TREE, is a tall forest tree, that grows on the Missouri bottoms, on the alluvial lands of Kentucky, on the Mississippi flats, and elsewhere. It is a beautiful tree, and would be highly ornamental, as well as useful. The Nut was used by the first settlers in Kentucky in place of Coffee.—I tried it by way of experiment, and thought it very good.

The Honey Locust exudes a gum, not inferior to Gum Arabic for many uses. I made a trial of it, but I am not certain that it possesses any medical virtues, although I think, the qualities of the Gum Arabic, are rather neutral. The Honey-Locust, grows very large here.

The Catalpa and the Creeper that find a place in the gardens of the Eastern States, grow spontaneously here, and on the banks of the Ohio. With us the Creeper adheres to the trunks of our overgrown trees, and scatters its gay flowers to the passing wind.

Dwarf Plum-trees, grow near this, on Prairie land, the fruit is said to be sweet and agreeable. Early grapes grow there also. Natural plums are plenty, and of several varieties. Gooseberries, &c. &c. grow in great abundance.

Of Mint, we have a great variety, some with peculiar fragrance, and if I can find a suitable mode of conveyance, I will endeavour to procure and send you such seed, as may be in my power—and in any wise calculated to promote your useful purposes.

Yours, &c. SARAH BELLA DUNLOP.

\* The receipt and seed will be thankfully received and usefully employed by the Editor.

From the Vermont Yeoman.

#### A NEW SORT OF INDIAN CORN.

As I was on my way to Boston, in October, 1817, an acquaintance of mine told me that a man in Bedford, by the name of Porter, had raised that year a new sort of corn, that was early and large. Our corn having been cut off by the frost for two or three years, I was anxious to embrace an opportunity to get an earlier sort, and the eight rowed corn was so unproductive, I did not choose to plant it, and had not for many years—I therefore called on Mr. Porter, who took me into his corn house, where he shewed me the most handsome bin of corn I ever saw. The ears were large and bright, and from eight to twelve inches long; and there were from ten to eighteen, but generally from twelve to sixteen rows on an ear. Mr. P. told me that it was a fortnight earlier there than the little eight rowed Canada corn. I bought about three pecks of it; a part of it in the ear to show its quality. I gave away several quarts of it to my friends on my way home. On the 28th day of May, 1818, I planted a piece of ground containing eighty-four rods by exact measurement, with some of said corn. I furrowed my ground about 3½ feet apart one way; I then took yard manure, that was carried out and laid in a large heap the fall before, and spread it all along in the furrows; I then took a horse and plough and turned the furrows back on the manure; I then put three kernels in a hill, and planted the hills about 20 inches apart, which made it about twice as thick that way as the other. It grew very large, and was admired. "I never saw the like," was the general expression of all who noticed it. Some of my neighbors wished me to ascertain the quantity that grew on that piece of ground, which I have

done as nearly as I could with convenience. In September, I picked for seed the first ripe ears all over the piece, and traced up just 20 ears in a trace, and 160 traces, which produced 3200 ears. I have since shelled out a greater part of it, and calculated the remainder with which I have shelled, and find the whole to amount to 28 bushels. The fore part of October I gathered the remainder, and had it husked out in one evening, and laid it in a heap in my corn house; and the next day we picked it over, and that which was then sufficiently dry to put into the bin, we measured in a basket which holds 2½ bushels of shelled corn, and had 26 baskets, which we judge would be as much or more than 26 bushels of shelled corn, which, together with 28 bushels of seed corn, makes 54 bushels; and we concluded that the part we refused to put into the bin was equivalent to the four rods which the piece of ground contained over half an acre—and by the cobs about in the field, we judged that the hens and turkeys had devoured 4 or 5 bushels. I therefore concluded that the whole product was as much as at the rate of one hundred and sixteen bushels to the acre.

It being a good season for corn, doubtless I should have had a large crop if I had planted my old sort; but I presume not so much by more than one quarter—this I ascertained by planting some side by side, and found its produce to be less than the new, by more than one quarter. Finding this new sort of corn to be so valuable an acquisition, and wishing to have it propagated as much as possible, I saved a large quantity of it for seed; and, that there might be a small beginning of it at least in each town in the state, I took 150 ears of it last October, and carried them to Montpelier, that the members of the legislature, who live so remote, that they would not otherwise have an opportunity to obtain it, might each of them take an ear.

SALMON DUTTON.

Cavendish, (Vt.) Feb. 15, 1819.

#### HOW TO PRESERVE SQUASHES.

Oxford, Chenango County, (N. Y.)

APRIL, 29th, 1821.

DEAR SIR,

I have the pleasure of acknowledging the receipt of your melon seeds, and have planted some of them yesterday. In answer to your inquiry as to the best method of securing squashes from the frost, during the winter season, I state to you, our general practice. Soon after the vines are dead, the squashes are removed and placed under cover, in an out house, or barn, wherein they are suffered to remain, until we are apprehensive of a frost, and then we remove them to a dry cellar, secured from frost, where we place them on boards. They are to be put down on the boards, singly, and not heaped together: in this way, we preserve the acorn squash until March, and the pumpkin until February. If the cellar is not perfectly free from frost, the squashes ought to be covered with a layer of straw.

I am, Dear Sir,

With great respect,

Your obedient servant,

G. VANDERLYN.

BALTIMORE, May 7, 1821.

RYE from the Mediterranean.

John S. Skinner, Esq.

SIR,—A writer in the last number of the Farmer, wishes to know what has become of the remarkable rye which was growing upon my farm three years ago, and of which an account was published in Niles' Register, and other papers. For the information of your correspondent, be pleased to state, that after two attempts, which but partially succeeded, to make it a winter grain, I am induced to believe that it will answer much better as a spring crop, and shall keep the produce of about an acre and a half, which was sown in November, and consequently much winter killed, for seeding with the next spring.

Respectfully, Your's,  
E. S. THOMAS.

#### THE FARMER.

BALTIMORE, FRIDAY, MAY 11, 1821.

#### PRICES CURRENT.

Flour, from the wagons, \$3 87½—Whiskey, from do 23 to 24 cts per gal.—Hay, per ton 18 to \$19—Straw, 7 to \$8—Wheat, White 80 to 85 cts—Red, do 75 80—Corn, 33 a 34 cts.—Rye, 35 to 37—Oats, wharf, 20 to 25 cents—Barley, 25 to 30 per bushel—Cod fish, per quintal, wholesale \$3, retail ditto \$4—New-England Beans per bushel, \$1 12½—ditto Peas, 75 cents—Plaster in stone \$6 per ton—do ground, \$1 35 per barrel, 33 cents per bushel, \$8 per ton—New Orleans Sugar \$7 50 to 10—Muscovado, do \$7 50 to 9 25—American White Lead, \$12 50—Ground, do. \$13 a 14—Lime Oil, 75 cts—Feathers, 40 to 45 cts—Potatoes, per bushel, 62½ to 75 cts—Skad, new, \$6—Herrings, \$2 to 2 25, declining—Fine Salt, 45 per 100 bushels—Ground Alum do 46 to 48—St. Ubes, 50—Cadiz, 38 to 40—retail do.—Turks' Island, 75—Cadiz ditto, 60—Live Cattle, 5 to \$5 50—Beef, prime pieces, 8 to 10 cents—corn Beef, 7 cents—Mutton, 8 to 10 cts—Hams, 10 to 12 cts—Middlings, 8 to 10 cts—Butter, 20 to 25 cts—Eggs, 12½ cts—Cheese, 8 to 10 cts. pr lb.—Tar, \$1 50—Turpentine, \$1 87½ to 28; Pitch, \$2½; Rosin, common 1½, bright do. \$3 per barrel.—Varnish, 25 cts—Spirits turpentine, 33 cts per gal.—Cotton, good Upland, 12 to 14 cts. very dull—Rice, 3 a 3½ cts.—ship and flooring Plank, \$25 to 27. Shingles, best 6½, 07, 08, \$3 to 4½ p. M.—Oak wood, \$4 50, Hickory, \$5 per cord—Clover seed \$6—Am. Orchard, grass do. \$4—Eng. do. do. or Cockfoot do. \$8.—Herds do \$3—Sanfoin, per bushel \$8—Millet, do. \$2—Lucern, 62 cents per lb—Sweet Scented Vernal grass, 150 cents—Trefoil, 50 cents per pound—Ruta Baga, 10 c n s—Mangle Wurtzel, 175 cents per pound—Cabbage seed 2 to 6 dolls. per pound—Cauliflower, 75 to 100 cts. per oz.—spring Turnes, 8 per bushel—Peas, 25 to 37½ cts per quart—short orange Carrot, 12½ cts.—Parsnip, 12½ cts.—Lettuce, 25 cents—Raddish, 12½ to 20 cts—Beet 20 cents—Brocoli, 31 to 100 cts.—Cucumber, 37 to 50 cts per oz.—Turnip seed, 50 to 125 cts per lb.—Chicory, 75 cts. per pound—Rape, 12½ cents do—large Amsterdam Cabbage for cattle, 25 cents per oz.—Irish Furz or Wins, \$2 per pound—Bush and Pole Beans, 6½ to 25 cents per quart—New York premium Ploughs of sizes from 7 to \$16—Box Churns, 8 to \$9—Drill Machines, 10 to \$11—Bennet's broad cast Machine for sowing Clover, Turnip, and Grass Seeds, \$18—Expanding Cultivators, \$15—Post Augurs, 5 to \$9—Flexible Tubes, to relieve cattle when hoven or choaked, with gags, the pair \$5—Corn Shellers, 20 to \$25—Turnip Scoops, 50 cents each—large 2 horse Connecticut Ploughs, iron mould boards, \$11—do. do. wood, 10½—small Ploughs, do. \$7 50.

Tobacco, Eastern Shore, first, 3 50 to 5 50—Potomac, 3 50, to 7—Patuxent, 5 to 7—Wagon, common 5 to 7—fine 8, to 12 50—Yellow, none.

☞ No sales of Virginia Tobacco since last report.